

Abstract

Adopting alternative energy sources not only help us to overcome energy crisis but also environment challenges. Pakistan is one of the vulnerable country of environment hazardous. One of the step to overcome this problem is to adopt renewable energy sources. The share of renewable energy is only two percent in our total electricity generation, which is very low. Renewable Energy sector of Pakistan needs to develop technological capability so that its share could be increased. Technological capability helps the firms to improve their product or service as according to market needs. It prepares the firms to face their rivalries and market challenges. There are many internal and external factors which affect the technological capability. Some of the internal factors are: education of founder and worker, trainings, high tech machines, experience of workers, firm's technology strategy. Some of the external factors are: political stability; government technology policy: IP law, import, export duties, visions; industry dynamics: competition, customer demand etc. and institutional support. Employee is one of those internal factors which affect technological capability. This Research is conducted on the solar service firms of renewable energy sector, which emerged as a result of energy crisis, of Pakistan. The research tried to assess the role of employee from the perspective of experience and education in building technological capability, and furthermore, the effect of technological capability on the financial performance of firm. Primary data is collected for this research. Data is collected from twenty two firms for almost seventy five workers from all over the Pakistan. Partial Least Square- Structure Equation Modelling (PLS-SEM) technique is used to conduct analysis for this research. SmartPLS3, software, is chosen for the analysis of this research. This research use the reflective scale as indicators are interchangeable. Results show that employee's experience and education level are not impacting over technological capability of a firm; however, technological capability is impacting over the financial performance of the firm. The results further show that the technological capability is not playing the mediating role in between education of employee and financial performance of the firm, and experience of employees and financial performance of firm. To conclude, it can be said that financial performance of the firm can be enhance by building technological capability of the firm in the renewable firms of Pakistan. Moreover, Technological Capability is not building on the basis of employees' experience and education in the solar service renewable firms of Pakistan.